

1 **DEPOSITORY CABINET**

2 **BACKGROUND OF THE INVENTION**

3 **Field of the Invention**

4 This invention pertains to the field of safes. More particularly, the
5 invention pertains to a depository cabinet, for use as a lockable deposit chamber
6 where numerous deposits may be irretrievably made for either dropping down into
7 a main safe located therebelow in the same room as the cabinet or dropping down
8 into a receptacle or a main safe located in another room. When used with a main
9 safe located in the same room as the cabinet, the combination of upper depository
10 cabinet and lower main safe can be made in such a low profile that it can be easily
11 positioned under a desk or other such piece of furniture to provide the requisite
12 safe features without occupying otherwise valuable floor space.

13 **Description of the Prior Art**

14 Many businesses are "area specific" meaning that their profitability
15 depends upon maximizing business areas and minimizing administrative areas.
16 For instance, in a fast food franchise, every square foot of usable work space
17 represents a part of a potential table or eating area or storage for supplies, and thus
18 profit, while every square foot of administrative (office) space represents lost work
19 space and a loss of potential profit. Thus, customer work and server space are
20 maximized while administrative space is minimized.

21 In addition, there are instances where adjacent rooms are established for the
22 purpose of having money counted and handled in one room but irretrievably
23 passed from the "counting" or "handling" room, through the wall dividing the
24 rooms, to the other, adjacent room where the money may be stored, packaged, paid
25 out to third parties, and the like. One such set of adjacent rooms would be located
26 in a gambling casino where depository boxes from gambling tables would be
27 brought, opened, and the money removed and counted. The money would then be

1 irretrievably deposited in a wall-mounted, depository cabinet to pass into a
2 receptacle or safe located in the adjacent room, on the opposite side of the wall,
3 where the money would be bundled and packaged for redistribution to other person
4 through access windows.

5 In addition, many businesses are run in shifts using managers to supervise
6 workers and to handle sales proceeds (or gambling proceeds) from their respective
7 shifts. At the end of each shift, a manager must deposit the proceeds in a safe to be
8 held securely therein for a period of time pending removal by the business owner
9 after a day or a plurality of shifts. This situation requires separate deposits to be
10 made in the upper deposit cabinet to drop down into a lower safe pending later
11 removal of the accumulated deposits therefrom.

12 It is not unheard of that unscrupulous employees will attempt to extract
13 monies deposited in the upper deposit cabinet or the lower safe before pickup by
14 the owner. This criminal activity usually involves sliding a wire or a fish hook on
15 a string into the depository cabinet for passage by gravity down into the safe where
16 the deposits have accumulated, and attempting to "fish" out the paper money, or
17 the deposit bags themselves. Once removed, the guilty employee blames the
18 previous manager for not making the deposit or not placing the reported sum in the
19 envelope when the initial deposit was made.

20 The prior art has developed, and currently markets, depository safes that
21 accept paper or coins or one or more envelopes of "deposits" which drop by
22 gravity down into a lower safe; however, these devices are merely safes with a
23 non-lockable, upper entryway that does not allow for moving the deposit anywhere
24 but downward into a lower safe. Generally, the prior art depository safe comprises
25 a lower main safe body having a first hollow safe interior accessible through a first
26 lockable door that is only openable by the business owner. An upper depository
27 cabinet is mounted in fixed position on top of the lower main safe body to allow
28

1 access to the lower main safe body through an unlocked top-mounted or front-
2 mounted door that is accessible to the managers (or anyone else) of the business.

3 The prior art uses four types of depository techniques in the upper deposit
4 cabinet. The first is a V-shaped hopper having a front mounted handle, pivotable at
5 the apex of the hopper so that when the handle is pulled outward from the top of
6 the cabinet, the hopper pivots forward to expose the interior of the hopper and to
7 accept the deposit therein. When the handle is released or pushed backward, the
8 hopper rotates inward of the cabinet and allows the deposit to fall off the rear
9 hopper wall down through the interior passageway between the cabinet and the
10 lower safe into the bottom hollow safe interior. The second type of deposit cabinet
11 is a pull-out drop drawer having a downwardly pivotable drawer floor, usually
12 hinged from the front, but sometimes the rear, of the drawer just inside the drawer
13 handle. When the drawer is pulled out from the deposit cabinet, the drawer
14 interior is exposed to make the deposit therein. When the drawer is pushed closed,
15 the drawer floor pivots downward, inside the deposit cabinet, allowing the deposit
16 to slide off the drawer floor, downward into the hollow safe interior in the lower
17 safe body. The third type has a rotary hopper in the deposit cabinet. An exposed
18 handle is used to rotate the hopper such that it opens through a hole in the top of
19 the cabinet. After the deposit is made in the hopper, the handle is twisted to rotate
20 the hopper and move the open hole in the hopper to align with a bottom hole in the
21 deposit cabinet, allowing the deposit to drop out of the hopper and down into the
22 safe interior. The fourth type is merely a horizontal slot formed in the top of the
23 cabinet. This type of safe accepts only thin envelopes of deposits, is very easily
24 pilfered and, for these reasons, is not readily accepted in the industry.

25 Each of these prior art depository cabinets share common problems which,
26 currently, have not been answered and which continue to plague the industry. The
27 first problem is that each cabinet is not lockable and requires the deposit to be

1 made inward through the top or top-front of the deposit cabinet. This causes two
2 problems: First, the entire combination of cabinet and safe is easy to pilfer.
3 secondly, the combination is too high and must occupy its own space in the small,
4 cramped manager's office. The floor space required by these prior art devices
5 removes floor space that could otherwise be used to either expand the customer
6 service area or the office space for other uses. The second problem is that each
7 cabinet can only be accessed through the top or top-front thereof. This requires
8 space over the top of the cabinet to be maintained free and clear of other furniture,
9 posting boards, shelving, and the like and represents a further loss of otherwise
10 usable space.

11 In addition, there is the problem with "fishing" extraction of deposits from
12 the lower safe body. Presently, virtually all prior art deposit cabinets are equipped
13 with "anti-fish" baffles that comprise special plates, walls, dividers, etc., placed at
14 various locations inside the deposit cabinet and in the passageway leading from the
15 upper deposit cabinet down into the safe. While these baffles are somewhat
16 protective of the contents of the deposits already made in the cabinet, criminal
17 ingenuity is constantly at work to overcome these safety measures and, at times, is
18 successful. It is a never-ending chore to develop new anti-fish baffles to stay one
19 step ahead of the thieves.

20 **SUMMARY OF THE INVENTION**

21 This invention is, in one embodiment, an under-table, upper depository
22 cabinet with some major exceptions, such as being lockable and having a low
23 profile, enabling the cabinet to be placed under an existing table or desk to save
24 valuable floor space. In another embodiment, the invention is a wall-mounted,
25 irretrievable, depository cabinet for accepting a deposit in one room and
26 transferring the deposit to another, adjacent room. Further, the invention embodies
27 a novel upper deposit cabinet having a door that opens from the front instead of
28

1 from the top. Opening from the front means that space above the cabinet can be
2 used for other reasons, such as a place upon which to set other objects, or a place
3 upon which other cabinets or furniture can be placed. The deposit cabinet contains
4 a unique deposit plate that opens with the door to allow placement of loose
5 currency or a "deposit" pouch thereon. A unique deposit actuator is provided that
6 is also arranged to open with the cabinet door and move outboard of the deposit
7 plate when the door is opened. When the deposit cabinet door is closed, both the
8 deposit plate and the deposit actuator move inward with the door. The deposit
9 cabinet includes a rake that passes closely over the deposit plate to force the
10 deposit off the plate and allow it to free-fall by gravity down into the lower safe
11 interior. The utilization of the deposit actuator in conjunction with the deposit plate
12 is a unique design and one that provides anti-fish properties not heretofore possible
13 in existing prior art cabinets. Further, the unique design of the doors in the cabinet
14 prevents access to the interior of the cabinet or to the lower safe, even if the
15 cabinet door hinges are severed in an intent to gain access to the interior of the
16 cabinet.

17 When used in conjunction with a pair of adjacent rooms, the inventive
18 cabinet may be wall-mounted having its openable, depository door on the wall in
19 one room and the body of the cabinet, including the opening in the cabinet floor, in
20 the adjacent room so that deposits made through the cabinet door from one room
21 drop down into the interior of the adjacent room to be captured by a lower-
22 mounted safe or a receptacle.

23 Accordingly, this invention is a unique, lockable, depository cabinet that
24 includes, in one embodiment, a lower safe to form a combination that is easily
25 positioned under a desk or table, and, in another embodiment, is wall-mountable to
26 allow deposits made in one room to be transferred into another room. In the first
27 embodiment, the lower safe is defined by a bottom wall, contiguous upstanding
28

1 side walls, a top wall, and a front wall, forming a first hollow safe interior
2 accessible through a first lockable front door mounted over an opening formed in
3 the front wall and pivotally mounted for swinging open and closed on a first hinge.
4 The upper deposit cabinet of this invention is provided in fixed position on top of
5 the lower main safe body, the upper cabinet defined by a bottom wall, contiguous
6 upstanding side walls, a top wall, and a front wall, forming a hollow interior
7 accessible through a second lockable front door mounted over an opening formed
8 in the front wall and pivotally mounted for swinging open and closed on a second
9 hinge. The interior of the deposit cabinet is in communication with the lower main
10 safe body interior through mutual openings formed in the bottom wall of the
11 deposit cabinet and the top wall of the lower main safe. Thus, the interior of the
12 lower main safe is accessible not only through the main safe door, but also through
13 a second lockable front door pivotally mounted above the first lockable front door
14 for swinging open and closed at a level not above the deposit cabinet. A
15 horizontally moveable deposit plate in the deposit cabinet is provided for receiving
16 a deposit thereon, when the cabinet door is opened, and for moving the deposit into
17 the hollow cabinet interior when the cabinet door is closed, so that it will drop, by
18 gravity, from the hollow cabinet interior, irretrievably down into the lower safe
19 interior.

20 The safe door includes a lock, such as a combination lock, to secure the
21 front door. The cabinet front door preferably includes an electric push button lock
22 having a digital readout and further includes a plurality of individual numerical
23 combinations that will each unlock the cabinet front door, and a computer memory
24 unit to record information as to the date and time the door was opened. This
25 allows each manager to have his or her own code and provides an "audit trail" to
26 the business owner to determine who, and when, a deposit was made and is an aid
27 in tracing thievery. Another feature making this invention popular in the industry
28

1 is the plurality of photoelectric cells or the like arranged to direct their beams
2 across the floor of the deposit cabinet into receptors where the beams will be
3 interrupted when a deposit falls from the interior of the cabinet downward into the
4 lower safe interior. This is further evidence for use in establishing an audit trail to
5 track thievery. A still further feature of this invention is that the floor plate is
6 formed with an uneven surface, such as sinusoidal, and the rake includes an edge
7 having a similarly formed shape for following closely on top of the floor plate.
8 This feature allows the deposit of free bills, checks and coins on the deposit plate
9 and insures that the rake will scrape these bills, checks and coins off the deposit
10 plate and allow them to drop down into the lower safe body. As earlier stated, the
11 deposit cabinet of this invention can be wall-mounted so that a deposit made in the
12 cabinet, on one side of the wall, can be easily arranged to drop into a safe or
13 receptacle located on the other side of the wall. The opening in the bottom wall of
14 the cabinet can be located on the opposite side of the wall on which the cabinet is
15 mounted to perform this unique function.

16 Accordingly, the main object of this invention is a depository cabinet that,
17 when placed in combination with a lower safe, is sufficiently low in profile as to
18 allow it to be placed under an otherwise non-useful surface such as a desk or table.
19 When wall-mounted by itself, the depository cabinet may be used as a means of
20 irretrievably depositing an item in one room and having it passed into another
21 room for capture in a safe or receptacle. Other objects of the invention include a
22 depository cabinet whose door can be arranged directly above the lower safe door
23 to provide only one side of the combination to be exposed for access to both the
24 upper cabinet and the lower safe and to allow this combination to be moved into a
25 cubbyhole such as in the wall of an office or under an existing desk or table. Still
26 further objects of the invention include a depository cabinet having a hollow
27 interior that is accessible from the front of the cabinet, a cabinet that allows
28

1 deposits of free bills, coins and checks therein not confined to the customary
2 pouch, and insures the items will be moved to the lower safe; a depository cabinet
3 that insures the transfer of deposits made therein to be passed down into the lower
4 safe; and, a cabinet that possesses unique anti-fish capabilities not possible with
5 current prior art devices.

6 These and other objects of the invention will become more clear when one
7 reads the following specification, taken together with the drawings that are
8 attached hereto. The scope of protection sought by the inventors may be gleaned
9 from a fair reading of the Claims that conclude this specification.

10 **BRIEF DESCRIPTION OF THE DRAWINGS**

11 Figure 1 is a perspective view of one of the preferred embodiments of this
12 invention;

13 Figure 2 is a front view of another embodiment of this invention showing
14 the locations of the door hinge pins in dotted outline;

15 Figure 3 is an illustrative view of another embodiment of this invention;

16 Figure 4 is a perspective view of the safe showing the lockable door being
17 hinged at the bottom of the opening in the safe front wall;

18 Figure 5 is a perspective view of the safe showing the lockable door being
19 hinged at the top of the opening in the safe front wall;

20 Figures 6a-6d are top views of the deposit handling means, taken along a
21 plane 6-6, as shown in Figure 2, showing four stages of closing the deposit
22 handling means in the cabinet;

23 Figure 7 is a perspective view of the depository cabinet and safe
24 combination shown in Figure 1 with the doors removed for better viewing and
25 with a section removed from the side walls and top walls of the cabinet and one
26 side wall of the safe to allow viewing of the inside thereof;

1 Figure 8 is a perspective view of the portion of the depository cabinet
2 showing the lockable door being hinged at the bottom of the opening into the
3 cabinet;

4 Figure 9 is a perspective view of the deposit plate having a sinusoidal
5 surface;

6 Figure 10 is a perspective view of the deposit actuator and the deposit plate
7 showing how the plate moves into the interior of the deposit actuator and showing
8 part of the interior of the deposit actuator;

9 Figure 11 is a top view of the deposit plate moving from outside the cabinet
10 into the cabinet interior and the door position means that controls the position;

11 Figure 12 is a perspective view of a portion of the slot in the front wall of
12 the deposit actuator and the rake that passes over the upper surface of the deposit
13 plate to scrape off the deposit in the interior of the cabinet;

14 Figure 13 is an illustrative view of a portion of the anti-fish baffles that are
15 mounted in the interior of the cabinet;

16 Figure 14 is a fragmentary sectional view of a portion of the front of the
17 door in the cabinet, showing how the rim and inset of the door and door jamb
18 prevent the insertion of fishing devices in through the cabinet door;

19 Figure 15 is a vertical plan view of the locking bar and shows the ability of
20 the bar to be moved into contact or near contact with the inside surface of a nearby
21 cabinet side wall to deter removal of the door should the hinge pins be severed;

22 Figure 16 is a side view of the locking bar shown in Figure 15;

23 Figures 17a-17c are illustrative views of a locking bolt that locks the
24 cabinet door closed (and locked) each time it is closed;

25 Figure 18 is a side view of the cabinet door showing the electronic lock, the
26 code input buttons, the digital readout and the computer processor incorporated
27 therewith;

1 Figure 19 is a side view of an outside handle for use on the cabinet lockable
2 door;

3 Figure 20 is a side view of a detent-type handle for use on the cabinet
4 lockable door;

5 Figure 21 is an illustrative view of the front door swinging into the cabinet;

6 Figure 22 is an illustrative view of the electric curtain formed by
7 photoelectric cells and receptors across the opening in the bottom of the deposit
8 cabinet for indicating when a deposit passes therethrough; and,

9 Figure 23 is a perspective view of a portion of the slot in the front wall of
10 the deposit actuator showing the deposit plate passing therethrough during opening
11 and closing of the cabinet door.

12 **DESCRIPTION OF THE PREFERRED EMBODIMENTS**

13 Turning now to the drawings wherein elements are identified with numbers
14 and like elements are identified with like numbers throughout the 23 figures, Figure
15 1 shows the overall configuration of this inventive deposit cabinet-safe 1 comprising
16 a lower main safe 3 generally defined by a bottom safe wall 5, three contiguous side
17 walls 7 (only one is shown), a front wall 9 and a top wall 11. Bottom safe wall 5,
18 side walls 7, front wall 9, and top wall 11 are typical safe walls made of metal, such
19 as iron or steel, and are contiguous in that they are joined together along their
20 intersecting side edges and bottom edges, such as by being cast in that configuration
21 or welded together along their respective contacting edges and corners. Thus
22 described is a safe having an interior 15 accessible through a lockable door 17
23 mounted over an opening 19 formed in front wall 9.

24 Opening 19 may be formed in a number of ways, take on a number of
25 configurations, and still remain within the spirit and scope of this invention. It is
26 preferred that opening 19 be mated with lockable door 17, preferably on a hinge pin
27 21 (Figure 2) so that door 17 can easily swing open or closed when unlocked. As
28

1025042502

1 shown in Figures 1 and 2, a lock, such as a combination safe lock 23, and a lock
2 handle 25 are provided to move locking bolts 27 into and out of locking recesses 29,
3 during locking and unlocking of safe 1. Hinge 21 is preferably a vertically-oriented
4 hinge so that door 17 swings through an arc parallel to the plane of safe bottom wall
5 or in a horizontal plane. Other means to hang door 17 on safe 1 and other
6 directions of movement of door 17, such as downward on a hinge located below
7 opening 19 (Figure 4) or opening upward on a hinge located above opening 19
8 (Figure 5) are also contemplated in this invention.

9 As shown in Figures 1 and 2, an upper deposit cabinet 35 is provided in a
10 fixed position and locked on top of lower safe 3, down on top of top wall 11. It is
11 preferred that deposit cabinet 35 be comprised of a top cabinet wall 37 and three
12 downwardly descending cabinet side walls 39 extending down toward safe side
13 walls 7 and front wall 9. Other configurations of side walls and front walls, such as
14 a round safe, are fully contemplated herein. The walls are in contiguous orientation,
15 meaning that they are also joined together along their respective intersecting side
16 edges and top edges such as by being cast in that configuration or welded together
17 along contacting edges and corners. Cabinet top wall 37, along with side walls 39,
18 a cabinet front wall 41, and a cabinet bottom wall 42, complete the exterior of
19 cabinet 35 and form a hollow cabinet interior 43 as shown in Figure 7. Interior 43 is
20 accessible through a lockable cabinet door 45 mounted over an opening 47 formed
21 in front wall 41 as shown in Figure 1. Cabinet bottom wall 42 forms an opening 48
22 that mates up with an opening formed in safe top wall 11 as will be more fully
23 explained later.

24 Lockable cabinet door 45 may be mounted on cabinet front wall 41 in a
25 variety of ways and still remain within the spirit and scope of this invention. It is
26 required, however, that cabinet door 45 be mounted such that, when it opens, it does
27 not exceed the plane of cabinet top wall 37 and that it provides an opening in from
28

100522P001A02502

1 the top of a deposit handling means that will hereinafter be more fully described.
2 For instance, door 45 can be mounted on one or more horizontally oriented hinges
3 49 located below the bottom edge 51 of opening 47 and swing through an arc as
4 shown in dotted outline in Figure 8. It is preferred, however, that door 45 be
5 mounted on one or more vertically oriented hinge pins 53 and swung through a
6 horizontal arc as shown in Figures 1 and 2.

7 A deposit handling means 55 is located inside deposit cabinet 35 and is
8 shown in Figures 1, 6a-6d, 9, 10 and 11 to comprise a deposit plate 59 that is
9 triangular, and preferably pie-shaped, in overall configuration and is further defined
10 by a front edge 61, a rear edge 63 and an outside edge 65. As shown in Figures 10-
11, a pivot hole 67 is formed at the junction 69 of the first terminal ends of front
12 edge 61 and rear edge 63. Outside edge 65 lies between the second terminal ends of
13 front edge 61 and rear edge 63 to form a three-sided perimeter. It is preferred, as
14 shown in Figure 10, that pivot hole 67 house vertically oriented hinge pin 53 that
15 supports deposit plate 59 in pivotal, horizontal attitude. As shown in Figure 10,
16 deposit plate 59 is further defined by top and bottom plate surfaces 73 and 75
17 respectively.

18 As shown in Figure 10, a deposit actuator 77 is likewise provided and
19 includes a front wall 79 and a rear wall 83, the latter being attached to the inside
20 surface of cabinet door 45. Deposit actuator 77 is three-dimensional and has a top
21 wall 85 and a bottom wall 87 in spaced-apart arrangement, as well as an outside
22 wall 93 as shown in Figure 1.

23 Because rear wall 83 is placed against or forms the inner surface of cabinet
24 door 45, deposit actuator 77 is actuated when said door is opened and closed,
25 swinging through a horizontal arc.

26 As shown in Figures 6a, and 7, a curved wall 97 is located inside cabinet 35
27 and provides a solid barrier inside cabinet 35 spaced very closely to deposit plate
28

1 outside edge 65 and deposit actuator outside wall 93 to allow very close passage
2 therebetween. As shown in Figure 7, safe top wall 11 is located tightly against the
3 inside of safe side walls 7, safe front wall 9, and cabinet bottom wall 42 and forms a
4 substantially pie-shaped opening 95 therein bounded by first and second side edges
5 99 and 101, respectively, and an outer curved edge 103. Opening 95 coincides with
6 cabinet bottom wall opening 48 to provide an unobstructed passageway from cabinet
7 35 down into safe interior 15 or otherwise in vertical communication with each
8 other. It is preferred that cabinet bottom wall opening 48 be bounded by first and
9 second side edges and an outer curved edge that coincide with edges 99, 101 and
10 103 of safe top wall opening 95. As shown in Figures 10 and 11, sleeve 111 is
11 attached along the joined terminal edges of deposit actuator front wall 79 and rear
12 wall 83 and encircles hinge pin 53.

13 A slot 113 is formed in deposit actuator front wall 79 near bottom wall 87, as
14 shown in Figures 10 and 12, for the purpose of allowing deposit plate 59 to pass
15 therethrough and into the hollow interior 115 of deposit actuator 77 as cabinet door
16 45 is pivoted on hinge pin 53. A rake 117, either added separately as shown in
17 Figure 12 or merely cut out of deposit actuator front wall 79, is located on front wall
18 79 adjacent and along slot 113. As shown in Figure 10, in one preferred
19 embodiment, deposit plate 59 is formed in a sinusoidal design that is concentric
20 about pivot hole 67. Rake 117 is made in the same sinusoidal design and arranged
21 to pass close to deposit plate top surface 73 when deposit plate 59 is passed through
22 slot 113 and into hollow interior 115 so that coins, checks and dollar bills deposited
23 on deposit plate top surface 73 will be scraped off and into opening 95 to fall
24 directly down into safe interior 15. A deposit plate position means 119 is provided
25 to control the position of deposit plate 59 as cabinet door 45 is opened and closed.
26 Means 119 is necessary to place deposit plate 59 inside cabinet interior 43 and
27 inside deposit actuator 77 when cabinet door 45 is closed against cabinet 35. Means
28

PCT/US2014/025007

1 119 is also necessary to place deposit actuator front wall 79 and deposit plate front
2 edge 61 at safe top wall opening front edge 101, and its coincident cabinet bottom
3 wall opening front edge so that anything previously deposited on deposit plate 59,
4 when cabinet door 45 was opened, has been pushed off therefrom to drop down
5 through openings 48 and 95 into safe interior 15.

6 When cabinet door 45, closed against cabinet front wall 41, is pulled open,
7 deposit actuator 77, inside door 45 with deposit plate 59 inside cabinet interior 45
8 and inside deposit actuator hollow interior 115, begins to swing or pivot outward
9 along with door 45. Means 119 is shown in Figure 11 to comprise a position tab
10 121, attached to deposit plate 59, that rotates with deposit plate 59 between a first
11 stop 123 and a second stop 125. As shown in Figures 10 and 11, as door 45 is
12 pulled open, deposit actuator 77 swings with it and begins to rotate out of cabinet
13 interior 43. As tab 121 strikes first stop 123, it causes deposit plate 59 to stop
14 rotating about hinge pin 53 and remain in position as door 45 is swung further open.
15 Deposit actuator 77 continues to swing outward and deposit plate 59 passes outward
16 through slot 113. When door 45 reaches full open, deposit plate 59 is fully exposed,
17 having its front edge adjacent cabinet front wall 41 while deposit actuator 77 is
18 further outboard and has its rear wall adjacent and in contact with door 45. Deposit
19 plate 59 is now ready to accept a deposit.

20 As shown in Figures 6a through 6d, when cabinet door 45, now fully open, is
21 swung closed, deposit actuator 77, adjacent door 45 with deposit plate 59 between it
22 and cabinet front wall 41, begins to swing or pivot into cabinet interior 43. Position
23 tab 121, attached to deposit plate 59, rotates with deposit plate 59 between a first
24 stop 123 and a second stop 125. As shown in Figure 11, as door 45 is closed further,
25 deposit actuator 77 swings with it and begins to rotate into cabinet interior 43.
26 Deposit plate 59 also rotates into cabinet interior 43. As plate 59 finally enters
27 cabinet interior 43, tab 121 strikes second stop 125, causing deposit plate 59 to stop
28

1 rotating about hinge pin 53 and remain in position inside cabinet front wall 41.
2 Deposit actuator 77 continues to swing inward with door 45 and deposit plate 59
3 begins to pass through slot 113 into deposit actuator 77 as actuator 77 rotates inward
4 into cabinet interior 43. As this occurs, rake 117 pushes the deposit off deposit plate
5 59 into openings 48 and 95 where it falls, under the influence of gravity, into safe
6 interior 15. When door 45 reaches its full closed position against cabinet front wall
7 41, deposit plate 59 is fully inside deposit actuator 77.

8 As shown in Figure 21, deposit actuator top wall 85 is preferably made to lie
9 and swing through a dotted line arc set slightly below the top edge 127 of opening
10 47 over which cabinet door 45 closes when shut against cabinet front wall 41.
11 Similarly, actuator bottom wall 87 is made to lie and swing through the same dotted
12 line arc set slightly above bottom edge 131 of opening 47. In this manner, deposit
13 actuator 77, with its full front wall 79 and full rear wall 83, completely fills opening
14 47 when passing therethrough. Curved wall 97, interior of cabinet 35, lies closely
15 adjacent actuator outside wall 93 during the same movement of door 45, inward to
16 cabinet 35, thus providing a full barrier to the entrance of "fish" wires, hooks and
17 strings into cabinet 35 when door 45 is in any position other than fully closed
18 against front wall 41. To further bar entrance against thieves, as shown in Figures 7
19 and 13, side edge 101 of opening 95, and preferably the coinciding side edge of
20 cabinet bottom wall opening 48, have formed thereon a plurality of sharp edges 133,
21 sharp points 135 and sharp-edged openings 137 to catch and hold or sever any wires
22 or strings that someone may attempt to slide under deposit actuator bottom wall 87
23 or over top wall 85 or around outside wall 93 in an effort to fish a deposit from safe
24 interior 15 or cabinet interior 43.

25 As shown in Figure 14, cabinet door 45 preferably is formed with an outside
26 rim 139 that fits into an inset 143 formed about opening 47. Rim 139 discourages
27 the practice of slipping or inserting a fish wire in between the edges of opening 47
28

1000284-042502

1 and deposit actuator 77 as well as giving cabinet 35 a streamlined design. In doing
2 so, door hinge pin 53 is inset from front wall 41.

3 A common practice of thieves is to sever a safe door hinge pin and remove
4 the door "backward" i.e., pulling the door edge adjacent the severed hinge or hinges
5 outward first without having to deal with the locking mechanism that is usually
6 located on the opposite door edge. This invention discourages such action in two
7 ways. First, the inset of cabinet hinge pin 53 as shown in Figure 2 means more
8 metal surrounds hinge pin 53 than if it were located outside front wall 41. This
9 means more heat is needed to sever pin 53 thereby requiring the thieves to use
10 bigger, heavier torches and to remain with the safe for a longer period of time.

11 Secondly, as shown in Figures 15 and 16, a locking bar 145 is slidingly
12 mounted on the outer surface 147 of deposit actuator front wall 79 cradled in a pair
13 of spaced-apart support flanges 149. Movement of said bar 147 is limited from side
14 to side on surface 145 by a peg 151 extending outward from surface 147 thru a slot
15 153 formed in bar 145. Bar 145 is further defined by a terminal end 159 that is
16 located close to the inside surface 161 of upper deposit safe side wall 39.

17 After full assembly of safe 1, and the assembly of locking bar 145 on outer
18 surface 147 of wall 79, lockable safe door 17 is opened and cabinet door 45 is
19 closed. The installer reaches his or her hand inside hollow safe interior 15 and
20 upward thru coincident openings 47 and 95 to grasp locking bar 145 which is by
21 then in a slideable position between support flanges 149. The installer grasps locking
22 bar 145 and slides it toward inside wall surface 157, that is the same wall next to
23 which door hinge 53 is located so that it's terminal edge 159 comes into contact with
24 side wall inside surface 157. A lock nut 163, threadably received on peg 151, is
25 then tightened to hold bar 145 in fixed position on the rear wall surface 147. Should
26 hinge pin 53 be severed by thieves, pulling door 45 out from the hinge pin side of
27
28

1 opening 47 will be deterred because of the interference of bar 145 with inside door
2 rim 139.

3 Locking means 167 on cabinet door 45 preferably comprises a push button-
4 type electric lock 169 coupled to a digital readout 171 as shown in Figures 2 and 18.
5 Lock 169 also preferably includes a computer processor 173 with an internal
6 memory section to record, for play back, information concerning the code entered,
7 the date, time, and duration of the opening of cabinet door 45. The function of lock
8 169 is that the memory is inputted with one or more access combination codes and
9 the push buttons are actuated by the manager or owner to input the codes, and
10 electronic processor 173 processes the codes and actuates the door lock when a
11 recognizable code is inputted therein. Each manager is provided with his or her own
12 special push-button code that is enterable into electric lock 169 to open cabinet door
13 45 for access to deposit plate 59. By this manner, each manger is identified when
14 opening cabinet door 45. This information may be used to identify the person using
15 safe 1 at certain times to reduce the area of inquiry should thievery take place.

16 A locking bolt 175, attached to door 45, locks door 45 each time it is pushed
17 closed. As shown in Figure 17a-17c, locking bolt 175 possesses a catch or undercut
18 177 that passes through a slot 179 formed in a bar 181 to catch against said bar and
19 hold door 45 closed (Figure 17a). Upon entering the proper code, bolt 175 is moved
20 sideways such that it does not catch bar 181 (Figure 17b) thus allowing door 45 to
21 be opened and bolt 175 to slip through slot 179. Each time door 45 is closed, bolt
22 175 passes through slot 179 (Figure 17c) and moves sideways, this time in the
23 opposite direction, to return to its position locked against bar 181 as shown in Figure
24 17a.

25 Handling means 183, on first lockable door 17, may include an outwardly
26 graspable handle 185, as shown in Figures 1 and 19, or inwardly graspable detent
27 type handle 187 as shown in Figure 2 and 20.

1 In Figure 3 is shown another embodiment of the invention. In this invention,
2 cabinet 35 is mounted in an opening formed in a wall 191. Wall 191 separates a
3 room 193 from another, adjacent room 195. Cabinet top wall 37, side walls 39, rear
4 wall 41 and bottom wall 42 extend into room 195 while cabinet door 45 opens into
5 room 193. Cabinet bottom wall opening 48 is located in room 195. As shown, a
6 deposit pouch 197 is inserted into cabinet 35 on deposit plate 59 and door 45 closed.
7 Pouch is moved off plate 59 as previously described so that it falls by gravity
8 through opening 48 to a receptacle 199 located below in room 195.

9 In Figure 22 is shown another embodiment of the invention wherein a
10 plurality of photoelectric cells 203 are arranged to shine across openings 48 and/or
11 95 into receptors 205 to provide an electronic curtain through which deposits pass as
12 they drop from cabinet 35 downward through openings 48 and/or 95. Photoelectric
13 cells 203 operate as a means for creating an electric curtain across the
14 communications opening between safe 1 and cabinet 35 and receptors 205 operate to
15 determine when the electric curtain has been penetrated by passage of an item, such
16 as deposit pouch 197 has been dropped from cabinet interior 43 down into safe
17 interior 15. This embodiment provides further evidence to the manager or store
18 owner to determine when deposits have been made into cabinet 35.

19 While the invention has been described with reference to a particular
20 embodiment thereof, those skilled in the art will be able to make various
21 modifications to the described embodiment of the invention without departing from
22 the true spirit and scope thereof. It is intended that all combinations of elements and
23 steps which perform substantially the same function in substantially the same way to
24 achieve substantially the same result are within the scope of this invention.

25

26

27

28